

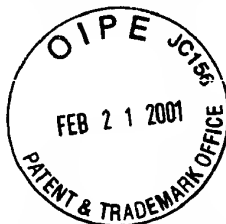
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

282 305

Applicant: Joseph E. Geusic et al.

Title: INTEGRATED CIRCUITS USING OPTICAL FIBER INTERCONNECTS FORMED THROUGH A SEMICONDUCTOR WAFER AND METHODS FOR FORMING SAME

Docket No.: 303.390US3
 Filed: August 30, 2000
 Examiner: Unknown



Serial No.: 09/650,569
 Due Date: N/A
 Group Art Unit: Unknown

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 TC 2200 MAIL ROOM

Commissioner for Patents
 Washington, D.C. 20231

We are transmitting herewith the following attached items (as indicated with an "X"):

- X A return postcard.
- X A Supplemental Preliminary Amendment (10 Pages).
- X A check in the amount of \$992.00 to cover the fee for additional claims as calculated below.

If an additional fee is required due to changes to the claims, the fee has been calculated as follows:

CLAIMS AS AMENDED						
	(1) Claims Remaining After Amendment		(2) Highest Number Previously Paid For	(3) Present Extra	Rate	Fee
TOTAL CLAIMS	44	-	20	24	x 18 =	\$432.00
INDEPENDENT CLAIMS	10	-	3	7	x 80 =	\$560.00
[] MULTIPLE DEPENDENT CLAIMS PRESENTED						\$0.00
TOTAL						\$992.00

Please consider this a PETITION FOR EXTENSION OF TIME for sufficient number of months to enter these papers and please charge any additional required fees or credit overpayment to Deposit Account No. 19-0743.

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231, on this 14 day of February, 2001.

Name Tina Pugh

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 (GENERAL)

S/N 09/650,569

PATENT

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SUPPLEMENTAL PRELIMINARY AMENDMENT

Commissioner for Patents
Washington, D.C. 20231

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Before taking up the above-identified application for examination, please enter the following amendments.

IN THE CLAIMS

Please cancel claim 1, without prejudice, and add the following new claims 39-82:

39. (New) A method of forming an electronic system, the electronic system including a first functional circuit interconnected to a second functional circuit, comprising:

forming the first functional circuit on a first surface of a semiconductor substrate;
forming a hole through the semiconductor substrate;
forming an optical fiber having a cladding layer and a core in the hole; and
interconnecting the first and the second functional circuits together via the optical fiber.

40. (New) The method of claim 39, wherein forming the hole comprises forming an etch pit at a selected location of the first surface of the semiconductor substrate, and performing an anode etch of the semiconductor substrate such that the hole is formed at the location of the etch pit.

41. (New) The method of claim 39, wherein forming the optical fiber comprises forming the cladding layer so as to surround the core, the cladding layer having a first index of refraction, and the core having a second index of refraction that is greater than the first index of refraction.

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